

ON A NEW SPECIES OF *EUCALYPTUS* FROM THE SYDNEY DISTRICT.

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(Plate XIX.)

E. squamosa.

A medium-sized tree, that is to say, averaging 30 ft. in height, and with a stem diameter of about 15 inches.

Bark.—Scaly, somewhat resembling that of *E. corymbosa*, but the scales thinner. The young stems are of a leaden colour, the outer bark thickens, turns bluish or ashy grey in colour, becomes fissured horizontally and longitudinally, thus taking on the scaly appearance. When the superficial scaly bark is removed, the bark is seen to be of a reddish-brown colour.

Timber.—Deep red.

Seedling leaves (as judged by the suckers)—Ovate, and finally ovate-lanceolate. So far as observed, always alternate and not opposite as in *E. viminalis*, *Stuartiana* and allies. Similar as regards arrangement of leaves, to *E. punctata*, *piperita* and some other species.

Mature leaves.—Narrow- to rather broad-lanceolate or ovate-lanceolate, slightly falcate, $3\frac{1}{2}$ to nearly 6 inches long. In colour pale green to glaucous, the surface glandular-punctate. Veins reddish, the midrib conspicuous owing to its dark colour, the petioles reddish like the veins. The margin thickened outside the marginal vein and coloured like the midrib; marginal vein very near the margin. Transverse veins numerous and fine, making an angle with the midrib of about 50° .

Peduncles.—Roundish, not flattened nor angular. Frequently or usually in pairs; this appearance is, as far as we are aware, characteristic.

The flowers generally from 8 to 12, usually 10 or 11.

Calyx-tube.—Subcylindrical, almost ovate, forming a continuous outline with the operculum. Somewhat urceolate in young fruit.

Operculum.—Ovate, but more or less pointed or beaked, and frequently showing a marked curve to one side. The length of the operculum about equal to that of the calyx, viz., about 3 lines.

Stamens.—Folded in the bud. The anthers almost globular, all fertile, and opening by two large lateral pores. The species in consequence belonging to the *Poranthere*.

Fruits.—Nearly hemispherical, with a slight tendency to constriction of the orifice; in extreme cases the fruits almost taking on an urceolate form. Size about 4 lines broad by 3 lines deep.

Rim sunk. *Valves* 3 or 4 and slightly exserted.

Range.—On sterile sandstone ridges from the Hawkesbury River to near Bulli (as far as known at present).

Affinities.—The anthers require the placing of this species in the *Poranthere*, and indicate its affinity to *E. hemiphloia* and the "Boxes." Its anthers are far larger than those of the latter species, and it differs in most other respects, *e.g.*, shape of fruits and colour of timber.

Its resemblance to *E. corymbosa* is chiefly in the bark.

Its most obvious superficial resemblance is to *E. punctata*, from which it is at once distinguished by the anthers. Other differences are indicated by the domed rim of *E. punctata*. In the new species the peduncles and pedicels are nearly round, not compressed as in *E. punctata*, while the bipedunculate arrangement has already been noted. The new species has also very pale green leaves, narrower leaves and more ruddy stalks than *E. punctata*.

After observation and consideration of this tree for a number of years we have arrived at the conclusion that it is expedient to declare it a new species.

Its most obvious characteristic is its scaly bark, of which we take cognizance in giving the specific name to the tree.

EXPLANATION OF PLATE.

Fig. 1.—Twig, showing sucker leaves.

Fig. 2.—Twig, with buds.

Fig. 3.—Leaf, showing venation.

Fig. 4.—Fruits.